

WHAT IS CLAIMED IS:

1. A bracket and pole assembly for use on a raised flooring surface, the assembly comprising:
  - (a) at least one bracket comprising a bracket shaft and a bottom support; the at least one bracket being attachable to a floor joist of the raised flooring surface with the bracket shaft being openable to a hole in the raised flooring surface; and
  - (b) at least one pole assembly comprising a removable hollow pole, an end portion of the pole being removably insertable in the bracket shaft and supportable on the bottom support.
2. The bracket and pole assembly according to Claim 1, wherein the bracket shaft is enclosed by three bracket shaft walls, an end of a first one of the bracket shaft walls being attached to a second one of the bracket shaft walls, an end of the second bracket shaft wall being attached to an end of a third one of the bracket shaft walls, a joist of the raised flooring surface comprising a fourth bracket shaft wall.
3. The bracket and pole assembly according to Claim 2, wherein the at least one bracket further comprises two bracket shaft joist walls separated by the bracket shaft, a first one of the bracket shaft joist walls being substantially perpendicularly connected at an end to the first bracket wall, a second one of the bracket shaft joist walls being substantially perpendicularly connected at an end to a first end of the third bracket wall, the third bracket wall being substantially perpendicularly connected at a second end to the second bracket shaft joist wall, the bracket shaft joist walls being connectable to the floor joist.
4. The bracket and pole assembly according to Claim 1, wherein the at least one pole assembly further comprises:
  - (a) cushioning along a base portion of the pole;
  - (b) a cap plug removably insertable in a top end of the pole; and

(c) a hook mechanism below the cap plug and above the pole base portion.

5. The bracket and pole assembly according to Claim 4, wherein the pole assembly further comprises:

(d) a base plug removably insertable in a bottom end of the pole; and

(e) a table attachment bolt shaft extending transversely through the pole below the hook mechanism.

6. The bracket and pole assembly according to Claim 4, wherein the hook mechanism comprises a hook having a linear portion and a curved portion, and a hook bolt shaft extending transversely through the pole, the linear portion of the hook extending through the hook bolt shaft.

7. The bracket and pole assembly according to Claim 3, further comprising at least two bracket wall holes, a first one of the bracket wall holes being in the first bracket wall and a second one of the bracket wall holes being in the third bracket wall; and wherein the bottom support is at least one bolt extending perpendicularly through the first bracket wall hole in the first bracket wall and the second bracket wall hole in the third bracket wall, and through the bracket shaft.

8. The bracket and pole assembly according to Claim 7, wherein the first and second bracket shaft joist walls, and the first, second, and third bracket walls are each generally rectangular in shape.

9. The bracket and pole assembly according to Claim 2, wherein the bracket shaft comprises a first side and a second side; a first end of the first side being connected at an obtuse angle to the first bracket shaft joist wall; a second, opposite end of the first side being connected to a first end of the second side to form an apex; a second, opposite end of the second side being connected at an obtuse angle to the second bracket shaft joist wall.

10. The bracket and pole assembly according to Claim 9, wherein the bottom support is a base plate, the base plate being affixed to a bottom end of the first side and a bottom end of the second side; and wherein the first bracket shaft joist wall, the second bracket shaft joist wall, the first side, and the second side are each generally rectangular in shape.

11. The bracket and pole assembly according to Claim 1, wherein the bracket shaft comprises a first bracket wall, a second bracket wall, and a third bracket wall; a first end of the first bracket wall being substantially perpendicularly connected to a first bracket shaft joist wall; a second, opposite end of the first bracket wall being substantially perpendicularly connected to a first end of the second bracket wall; a second, opposite end of the second bracket wall being substantially perpendicularly connected to a second end of the third bracket wall; a first end of the third bracket wall being substantially perpendicularly connected to a second bracket shaft joist wall, the bracket shaft joist walls being connectable to the floor joist.

12. The bracket and pole assembly according to Claim 11, wherein the bottom support is a base plate, the base plate being affixed to a bottom end of the first bracket wall and a bottom end of the third bracket wall.

13. The bracket and pole assembly according to Claim 12, wherein the hook mechanism comprises a hook, and a plurality of hook bolt shafts and hook bolts; the hook bolt shafts extending transversely through the pole; the hook bolts being insertable through the hook and the hook bolt shafts.

14. The bracket and pole assembly according to Claim 3 further comprising a filler plug, which comprises:

(a) a filler bottom section that is generally cylindrical in shape, a diameter of the filler bottom section being less than the diameter of the hole in the flooring surface; and

(b) a generally circular filler top section connected to the filler bottom section;

wherein the filler plug is removably insertable in the bracket shaft.

15. The bracket and pole assembly according to Claim 3 further comprising a step down plug, which comprises:

(a) a step down plug top section;

(b) a step down plug bottom section connected to the step down plug top section, the step down plug bottom section being removably insertable in the bracket shaft; and

(c) a generally circular step down plug aperture extending through a center of the step down plug top section and the step down plug bottom section.

16. The bracket and pole assembly according to Claim 3, further comprising a table attachment mechanism, the table attachment mechanism comprising:

(a) a table attachment top section;

(b) a table attachment bottom section connected to the table attachment top section;

(c) a generally circular table attachment aperture extending through the center of the table attachment top section and the center of the table attachment bottom section; and

(d) a table bolt shaft extending transversely through the table attachment bottom section.

17. The bracket and pole assembly according to Claim 16, wherein the table attachment top section and the table attachment bottom section are generally cylindrical in shape, a diameter of the table attachment aperture is about equal to an outer diameter of

the pole, and a diameter of the table attachment bottom section is smaller than a diameter of the table attachment top section.

18. The bracket and pole assembly according to Claim 16, wherein the table attachment aperture is slidable over the pole and the table attachment is removably secured to the pole by a table bolt inserted through the table bolt shaft and the table attachment bolt shaft.

19. The bracket and pole assembly according to Claim 7, further comprising a cylindrical bolt cover over each bracket wall bolt, the bolt cover being about equal in length to the width of the bracket shaft.

20. The bracket and pole assembly according to Claim 4, wherein the cap plug comprises a lamp.

21. The bracket and pole assembly according to Claim 19, wherein a central hole in a tabletop has a diameter about equal to an outer diameter of the pole, the hole in the tabletop is slidable over the pole, and the table attachment mechanism supports the tabletop.

22. The bracket and pole assembly according to Claim 3 further comprising a cap step down plug, the cap step down plug comprising:

- (a) a cap step down plug top section;
- (b) a cap step down plug bottom section connected to the cap step down plug top section;
- (c) a generally circular cap step down plug aperture extending through the center of the cap step down plug top section and the center of the cap step down plug bottom section; and
- (d) an attachment bolt shaft extending transversely through the cap step down plug bottom section;

wherein the cap step down plug bottom section is insertable in a top end of the pole.

23. The bracket and pole assembly according to Claim 24, wherein an outdoor accessory assembly is removably insertable in the cap step down plug aperture of the cap step down plug, the cap step down plug being removably secured to the pole by an attachment bolt through the attachment bolt shaft and the hook bolt shaft..

24. The bracket and pole assembly according to Claim 25, wherein an umbrella is removably insertable in the cap step down plug aperture of the cap step down plug.

25. The bracket and pole assembly according to Claim 22, wherein the outdoor accessory assembly comprises a lazy susan.

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26. A kit comprising at least one bracket and pole assembly for use on a raised flooring surface, the kit comprising:

(a) at least one bracket comprising a bracket shaft; the at least one bracket being attachable to a floor joist with the bracket shaft openable to a hole in the raised flooring surface;

(b) at least one pole assembly comprising a removable hollow pole, an end portion of the pole being removably insertable in the bracket shaft;

(c) at least one tabletop attachable to the at least one pole assembly; and

(d) at least one tabletop attachment mechanism.

27. The kit according to Claim 26, further comprising:

(e) at least one cap step down plug insertable in the top of the at least one pole assembly, the at least one cap step down plug comprising a cap step down plug aperture; and

(f) at least one outdoor accessory assembly removably insertable in the cap step down plug aperture.

28. The kit according to Claim 26, further comprising:

(g) a cable with an in-line turnbuckle, the cable being extendible between two of the at least one brackets.

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29. A heavy duty bracket and pole assembly for use on a raised flooring surface, the assembly comprising:

(a) at least one heavy duty bracket comprising a heavy duty bracket shaft, a bottom support within the heavy duty bracket shaft, and a single bracket shaft joist wall attached to the heavy duty bracket shaft; the at least one heavy duty bracket being attachable to a floor joist of the raised flooring surface with the heavy duty bracket shaft opening to a corresponding hole in the raised flooring surface;

(b) at least one pole assembly comprising a removable hollow pole, an end portion of the pole being removably insertable in the heavy duty bracket shaft and supportable on the bottom support; and

(c) a taut cable with one end attached to the at least one heavy duty bracket.

30. The heavy duty bracket and pole assembly according to Claim 29, further comprising a turnbuckle in the cable; and wherein the assembly comprises two spaced-apart ones of the at least one bracket, with each opposite cable end being attached to one of the two brackets.

31. The heavy duty bracket and pole assembly according to Claim 30, wherein the heavy duty bracket shaft is a four-walled bracket shaft enclosed by a first pair of bracket walls that are oriented substantially parallel to one other, and a second pair of bracket walls that are oriented substantially parallel to one other, and substantially perpendicular to the first pair of bracket walls.

32. The heavy duty bracket and pole assembly according to Claim 31, wherein the bottom support is at least one bolt extending perpendicularly through a first bracket wall hole in a first one of the first pair of bracket walls, and a second bracket wall hole in a second, opposite, one of the bracket walls, and through the heavy duty bracket shaft.

33. The heavy duty bracket and pole assembly according to Claim 29, wherein the heavy duty bracket shaft is an attached, extended, four-walled bracket shaft, a vertical dimension of the extended, four-walled bracket shaft being greater than a vertical dimension of the single bracket shaft joist wall.

34. The heavy duty bracket and pole assembly according to Claim 33, further comprising at least one I-bolt having an eye, the I-bolt extending through a corresponding I-bolt hole in a bracket wall of the four-walled, heavy duty bracket shaft.